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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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24197	7590	09/24/2007	EXAMINER	
KLARQUIST SPARKMAN, LLP			CHAWLA, JYOTI	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/661,411	SNYDER, GARY A.	
	Examiner	Art Unit	
	Jyoti Chawla	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 15-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/7/07</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 7, 2007 has been entered. Claims 1-14 have been cancelled and new claims 15-24 have been added. Claims 15-24 are pending and are examined in the application.

Specification

The amendment filed August 7, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The amended material which is not supported by the original disclosure, includes the changes in amount in percent of methyl anthranilate in all the examples. Methyl Anthranilate is the compound responsible for the grape flavor as instantly claimed. Applicant has only provided clerical error, as the reason for changing the percentages, however, there is no explanation or calculations to show that the current amendment is originally supported by the specification. Applicant is required to furnish explanation to support the newly amended percentages and cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the instant case the subject matter includes the process of imparting the grape flavor to pome fruit product and the resulting product, where grape flavoring admixture (containing methyl anthranilate) is applied to the surface of the exocarp of post-harvest pome fruit in such a way that the grape flavor is present in the pericarp and the mesocarp of the post-harvest fruit. The fruit thus obtained when stored for at least one month maintains grape flavor.

In order to make and use the invention, one of skill in the art would at least need to know the concentration of methyl anthranilate in the admixture applied, the duration of application, processing conditions the fruit before, during and after the application (i.e., temperature), storage conditions and type of fruit. Thus the disclosure as recited does not enable one of skill in the art to make and use the instantly claimed invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 is unclear for the recitation of "*dipping the grape flavoring admixture to the exocarp of a post-harvest pome fruit*". As recited it is unclear as to how the step of "*dipping the grape flavoring admixture to the exocarp of a post-harvest pome fruit*" is accomplished and how the step as recited is different from the dipping the fruit for the purposes of prior art comparison.

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The phrase "*dipping the grape flavoring admixture to the exocarp of a post-harvest pome fruit*" is grammatically incorrect.

The term "cold storage" in claim 20 is a relative term which renders the claim indefinite. The term "cold storage" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear as to what temperature would be included in the cold storage, e.g., would a temperature of 60⁰F be considered cold or 40⁰F be considered cold etc. Thus the claim as recited is unclear.

Claims 20 and 21 are indefinite for the recitation of (Claim 21)"storing of the post-harvest pome fruit for at least one month". The applicant has also not specifically stated the temperature of storage other than cold storage, which is a relative term. Thus it is unclear as to how the fruit is stored, what temperature range, and what storage conditions from the claim as recited. Clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.
Ascertaining the differences between the prior art and the claims at issue.
Resolving the level of ordinary skill in the pertinent art.
Considering objective evidence present in the application indicating obviousness or nonobviousness.

(A) Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shillington et al (US 3533810) in view of the combination of Gross (US 3071474) and methyl anthranilate by www.thegoodscentcompany.com.

Shillington et al., hereinafter Shillington, teaches application of a composition comprising methyl anthranilate to post harvest fruits and vegetables (Column 1, lines 15-35) and specifically to pome fruits such as apples and pears (Column 4, lines 73-75 and example 8) as recited by the applicant in claims 15-24. Shillington teaches of treatment of fruits and vegetables in general however, examples 6-8 in Column 4, specifically teach the process of treatments and the fruits and vegetables, such as, apples and pears, as recited by the applicant in claims 16-18 and 20, 22-23. Shillington teaches application of a methyl anthranilate containing composition to unpeeled whole fruits and vegetables by coating the surface of the whole fruit by dipping or immersing the whole fruit in the composition (Column 2, lines 43-61 and column 4, lines 57-75) as recited by the applicant in claims 15, 18 and 20.

Shillington reference does not state that methyl anthranilate imparts grape flavor to the fruit. However, Methyl anthranilate has been known in the art to have an inherent property of imparting a grape odor and flavor to compositions (foods, beverages, perfumes), as evidenced by the detailed datasheet from www.thegoodscentcompany.com.

The reference teaches of application of methyl anthranilate to the pericarp/exocarp of the fruit, but it does not specifically state that methyl anthranilate admixture is present in the mesocarp of the post-harvest pome fruit. Regarding the presence of the compound in the mesocarp of the fruit or vegetable, Shillington teaches that application of methyl anthranilate containing composition enhances the aroma of the created product (Column 2, lines 26-28 and Column 3, lines 1-7). Since the reference teaches of application of a coating containing methyl anthranilate on the pericarp/exocarp of fruits as instantly claimed, it would be expected that the effect of the application, i.e., the presence of grape flavor in the mesocarp of the fruit, would also be similar to the

instantly claimed invention. Thus Shillington teaches of the presence of methyl anthranilate (i.e., grape flavor) in the fruit as recited by the applicant in claims 15-24.

Regarding claims 19 and 24, Shillington teaches of Methyl anthranilate, however the reference does not teach that the compound is derived from grapes, however methyl anthranilate was known to be obtained from grapes at the time of the invention, as also disclosed in applicant's specification under Background art. Gross teaches that methyl anthranilate is an important compound found in fresh grape juice that is responsible for the characteristic fresh grape juice flavor and aroma in food. Therefore to use Methyl anthranilate from any available source would be a matter of choice for one of ordinary skill in the art at the time of the invention. One of ordinary skill would have been motivated to choose methyl anthranilate obtained from grapes (as taught by Gross) because it is less expensive or has been processed to a lesser extent as compared to methyl anthranilate from other sources. Thus grapes as sources of methyl anthranilate were known and using a compound obtained from one particular known source as compared to another known source would not impart patentable distinction to the claims as recited absent any clear and convincing arguments or evidence to the contrary.

Regarding the limitation of claim 20, where the fruit is stored in cold storage, Shillington does not specify the storage conditions as instantly claimed, however, it was known to store fruit in a cold storage at the time of the invention. Thus to apply a treatment to fruits and store the fruits in a cold storage would have been an obvious choice for one of ordinary skill in the art at the time the invention was made, in order to allow the grape flavor to penetrate through the pericarp and into the mesocarp and also to extend the storage life of the fruits. Thus to store perishable foods, such as apples and pears in a storage with cold temperatures would not impart patentable distinction to the claims as recited absent any clear and convincing arguments or evidence to the contrary.

Regarding claim 21, Shillington provides data that the fruits and vegetables remain fresh for at least 10-14 days, Columns 5-6 and tables 1 and 2). Since the applicant has not specified the concentration of methyl anthranilate, temperature and specific conditions of storage, therefore, it would be obvious to one of ordinary skill in the art at the time of the invention that the fruits and vegetables as treated by Shillington would also be expected to retain the flavor of methyl anthranilate at least for over a period of one month when stored in comparable temperature, storage conditions as the instantly claimed invention, absent any clear and convincing evidence or arguments to the contrary.

Therefore, claims 15-24 are obvious over Shillington in view of Gross and www.thegoodscentcompany.com.

(B) Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US 3669684) in view of the combination of Kare (US 2967128), Michael (US 3427167) and Gross (US 3071474).

Weaver teaches a process of enhancing the flavor of foods (e.g., fruit, vegetable, nuts and eggs), where the foods in their natural state may be given additional flavor of the same or another food, such that a single natural food (e.g., fruit) itself would contain either enhanced or blended flavors (Column 1, line 25-40 and 55-68; Column 2, lines 1-3). Weaver teaches subjecting the food to a desired flavor-imparting ingredient, such as, the flavor essence or concentrate (Column 2, line 60 to Column 3, line 10).

Weaver teaches exposing the whole natural foods, such as, uncut and unpeeled fruits, vegetables and eggs etc., to desired flavors (Columns 3-6). Weaver also teaches imparting flavors to pears and apples (Column 5 and 6, examples 6, 7, 12 and 13) as recited by the applicant. Weaver, however, does not teach addition of methyl anthranilate to the flavoring composition and also does not teach dipping the fruits in the flavoring composition.

Kare teaches bird repellants, i.e., flavored compounds that considered pleasant to humans, when applied to foods and other objects, render the objects unattractive to birds (Column 1, lines 15-55). Kare teaches application of compounds like dimethyl anthranilate, and methyl anthranilate to foods is effective in repelling birds, while it is not harmful to the foods and animals (Column 2, lines 57-71). Kare further teaches that the composition comprising methyl anthranilate can either be sprayed or sprinkled on to the foods or alternatively the foods can be soaked in the composition and dried (Column 3, lines 16-38).

Michael teaches that methyl anthranilate has been used in the food industry to make grape flavored drinks and enhance the grape flavor of food products like jams and jellies etc. (Columns 1 and 2).

Methyl anthranilate and dimethyl anthranilate both compounds provide characteristic grape flavor and aroma as evidenced by www.thegoodscentcompany.com.

Flavoring compounds have been employed to impart different flavors or to enhance the natural flavors of harvested whole fruits and vegetables (apples and pears) in the art (Weaver). Methyl anthranilate has been used to flavor crops and food and other articles (by spraying or dipping) to render the treated articles unattractive to birds while still maintaining desirability for other animals and humans (Kare). Methyl anthranilate has also been known in the art for its characteristic grape flavor and aroma that it imparts to the composition it is added (Michael). Grape flavor is one of the popular flavors for consumers, especially kids. Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to modify Weaver and apply composition containing methyl anthranilate to apples, pears among other fruits or vegetables to add to the natural flavor of these fruits and also make the natural foods more attractive and palatable for consumers. One would have been further motivated to do so in order to encourage healthier eating habits by giving the regular fruits and vegetables a flavor twist to make eating fruits and vegetables more interesting to children.

The modified Weaver teaches of application of methyl anthranilate to the pericarp/exocarp of the fruit, but it does not specifically state that methyl anthranilate

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adixture is present in the mesocarp of the post-harvest pome fruit. Regarding the presence of the compound in the mesocarp of the fruit or vegetable. Since modifies Weaver reference teaches of application of a coating containing methyl anthranilate on the pericarp/exocarp of fruits as instantly claimed, it would be expected that the effect of the application, i.e., the presence of grape flavor in the mesocarp of the fruit, would also be similar to the instantly claimed invention. Thus modified Weaver teaches of the presence of methyl anthranilate (i.e., grape flavor) in the fruit as recited by the applicant in claims 15-24.

Regarding claims 19 and 24, references teach of Methyl anthranilate, however the reference does not teach that the compound is derived from grapes, however methyl anthranilate was known to be obtained from grapes at the time of the invention, as also disclosed in applicant's specification under Background art. Gross teaches that methyl anthranilate is an important compound found in fresh grape juice that is responsible for the characteristic fresh grape juice flavor and aroma in food. Therefore to use Methyl anthranilate from any available source would be a matter of choice for one of ordinary skill in the art at the time of the invention. One of ordinary skill would have been motivated to choose methyl anthranilate obtained from grapes (as taught by Gross) because it is less expensive or has been processed to a lesser extent as compared to methyl anthranilate from other sources. Thus grapes as sources of methyl anthranilate were known and using a compound obtained from one particular known source as compared to another known source would not impart patentable distinction to the claims as recited absent any clear and convincing arguments or evidence to the contrary.

Regarding the limitation of claim 20, where the fruit is stored in cold storage, Weaver teaches of keeping the foods at various temperatures, such as 400 F and 700F etc depending on the storage need of the food (See examples 1-6). Thus it was known to store fruit in a cold storage at the time of the invention. Thus to apply a treatment to fruits and store the fruits in a cold storage would have been an obvious choice for one of

ordinary skill in the art at the time the invention was made, in order to allow the grape flavor to penetrate through the pericarp and into the mesocarp and also to extend the storage life of the fruits. Thus to store perishable foods, such as apples and pears in a storage with cold temperatures would not impart patentable distinction to the claims as recited absent any clear and convincing arguments or evidence to the contrary.

Regarding claim 21, the references do not specify the storage life of the flavored fruit, however, the applicant has not specified the concentration of methyl anthranilate, temperature and specific conditions of storage. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention that the fruits and vegetables treated with methyl anthranilate (as taught by Weaver in view of Kare and Michael) would also be expected to retain the flavor of methyl anthranilate at least for over a period of one month when stored in comparable temperature, storage conditions as the instantly claimed invention, absent any clear and convincing evidence or arguments to the contrary.

Therefore, claims 15-24 are rejected under 35 U.S.C. 103(a) as being obvious over Weaver in view of the combination of Kare, Michael and Gross.

Response to Arguments

Applicant's arguments filed August 7, 2007 have been fully considered but are moot but are moot in view of the new ground(s) of rejection. Regarding specific arguments regarding the references, the applicant is referred to the final rejection of March 7, 2007.

- 1) Regarding applicant's argument that "using the concentration of methyl anthranilate disclosed in Shillington et al. would not produce the claimed pome fruit comprising a grape flavor" (Remarks, page 4) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the

features upon which applicant relies (i.e., concentration of methyl anthranilate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

2) In response to applicant's arguments against the references individually (Remarks, Pages 4-5), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant is also referred to the office action above.

3) Applicant's argument that Michael teaches that methyl anthranilate is not the preferred compound for imparting grape flavor to certain foods based on comparison with other grape flavored compounds and in a food test, (Remarks, page 5,paragraph 4) has not been found persuasive because Michael is teaching that it was known at the time of the invention to add methyl anthranilate to foods in order to impart grape flavor to foods as instantly claimed. Since the instantly claimed invention only requires a positive recitation of methyl anthranilate's property of imparting grape flavor, and does not require the comparison of various grape flavor compounds, the teaching other grape flavored compounds by the reference does not teach away from the instantly claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jyoti Chawla
Examiner
Art Unit 1761



KEITH HENDRICKS
PRIMARY EXAMINER